CIO Information session
October 20, 2004

State of Iowa Centralization Impact Assessment

"Developing a Responsive and Agile Organization"

What are the Information Session Objectives

Session Objectives:

- Provide an update to the CIO Council with the latest Assessment status, models and thinking
- Offer an Opportunity to Provide Feedback into the process (Wes as the focus ~ wes.hunsberger@iowa.gov)

CIO Council role:

- Gain engagement perspectives
- Provide feedback

Outcomes and Next Steps:

- *Receive CIO Council and AFSCME input by Oct 27th*
- *Consolidate appropriate information into recommendations*
- *Final Draft results to EIP Committee Nov 5th*
- *Final Report and Recommendations December 1st*
- *Legislative Session Review*

Introduction and Agenda

- Current Project Status
- Organizational Trends
- Process Recommendations Updated
- Process Model Review
- Organizational Model Review
- Provide input by Oct 27th
- Next Steps

What are the Objectives of House File 534

- **How can investments in technology add Maximum Value to the State?**
- **How can we increase cost effectiveness on a statewide basis?**
- **How can we provide a greater focus on the core mission of the State?**
- **How can we effectively manage Scarce Resources and improve service delivery?**

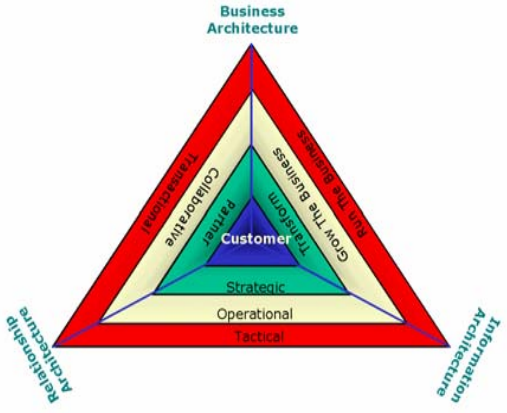
Assessment Roadmap

- **What We found**
- **How we analyzed the findings**
- **Resulting in specific conclusions for Iowa**

Major Methods & Tools Utilized

Assessment Methods and Process

- **What did we look at**
  - ***Business Architecture***
  - ***Information Architecture***
  - ***Relationship Architecture***



- **How did we find it**
  - ***Critical Success Factor Interviews (CSF's)***
  - ***Value Perception Survey***
  - ***Operational Maturity Assessment (CoBIT, ITIL and IT Standards Org)***
  - ***Financial Perspectives (Research, Document reviews, surveys)***
  - ***Coeur Research and benchmarks***

- **How did we analyze the information**
  - ***Proven Methods***
  - ***Models***
  - ***Tools***
    - **Statistical analysis**
    - **Empirical evidence**
    - **Factual evidence**
    - **Observational aspects**

Value Perceptions

Coeur Business Group

What is The Value of Information Technology?

Business

Firm Grasp of IT Business Value
Position Role and Use of IT within Business
Respond to Competitive Technology Opportunities or Threats
Time Critical Deployment of IT
Develop and Maintain Competitive IT Capability
Continual IT Business Alignment

Leadership

Establish and Align Expectations for IT
Reskill IT Personnel to be Business Literate
Establish and Maintain IT Processes
Promote and Drive IT Value Initiatives
Manage Change and Culture Issues
Measure and Communicate Value of IT

Technology

Deploy and Maintain Applications
Establish Stable and Reliable Operations
Deploy & Maintain Infrastructure
Establish and Maintain Sourcing Strategies
Manage Technology Obsolescence
Manage Critical Risks

Management Perceptions of IT Value

Value of IT Assessment

- **Executive Views & Perceptions**
- **IT and ITE Views and Perceptions**
- **Gap Analysis**
- **"Best Actions to Best Practices"**

Business

Rating	No				Yes
	L		M		H
	1	2	3	4	5

Firm Grasp of IT Business Value	**Score**
• Does IT play a meaningful role in the overall capability of the Department? (1= no, 5-yes)	5
• Is the value of responsive and relevant information readily understood by IT? (1=no at all, 2=somewhat, 3=50/50, 4= increasing value, 5=highly valued)	5
• Does the Department understand the value that Information Technology can/should contribute? (1= no, 5-yes)	5
Position Role and Use of IT within Business	**Score**
• How is the role of IT seen within the Department? (1= pure cost overhead, 2= some value/mostly cost, 3=about the same, 4= mostly value/some cost, 5= value add)	5
• How frequently do the Department users offer ideas, suggestions or plans to create value from Information Technology? (1= seldom, 2=sometimes, 3=average, 4= quite often, 5=it seems like all of the time)	5
• Does the IT function actively encourage new solutions that use Information Technology to meet the business goals? (1= not encouraged, 5=strongly encouraged)	5
Respond to Business Technology Opportunities or Threats	**Score**
• Has your Department ever gained a significant business advantage from something it did with Information Technology? (1=don't know, 2= no, 3= on occasion 4= often 5= very often)	5
• Does the Department R&D function actively explore how to use Information Technology? (1=no R&D, 2=very little, 3=somewhat, 4=strategic initiatives only, 5= yes)	5

Defined an Immediate Business Value Agenda

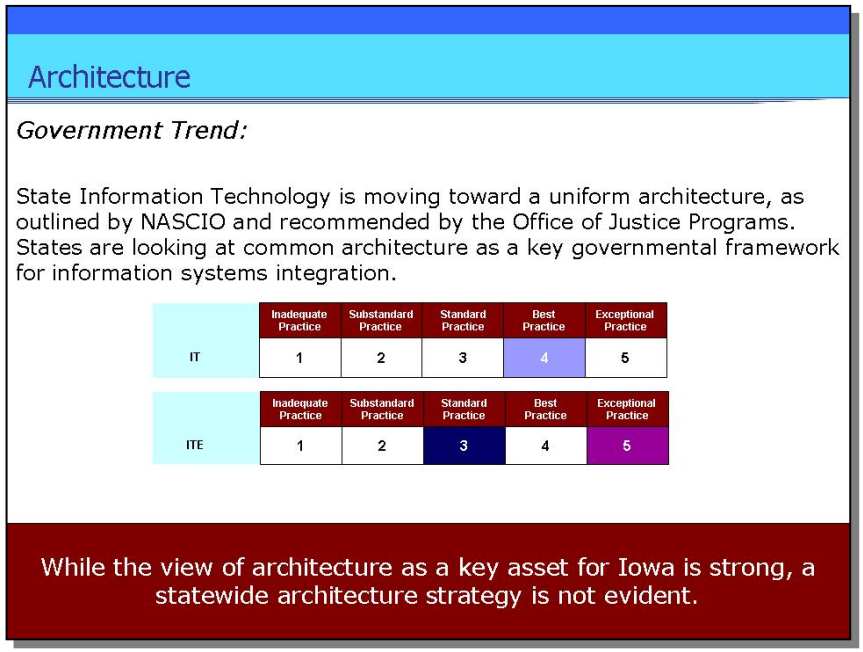
Agility and Organization Effectiveness Perceptions

Scorecard Item	Inadequate Practice	Sub-standard Practice	Standard Practice	Best Practice	Exceptional Practice
ITD Business Alignment and Relationship Management	1	2	3	4	5
	Executive=			ITE=	
Firm Grasp of IT Business Value					
• Does IT play a meaningful role in the overall capability of the Department? (1= no, 5-yes)			3		
• Is the value of responsive and relevant information readily understood by IT? (1=no at all, 2=somewhat, 3=50/50, 4= increasing value, 5=highly valued)			3		
• Does the Department understand the value that Information Technology can/should contribute? (1= no, 5-yes)			3	4	
Position Role and Use of IT within Business					
• How is the role of IT seen within the Department? (1= pure cost overhead, 2= some value/mostly cost, 3=about the same, 4= mostly value/some cost, 5= value add)			3		
• How frequently do the Department users offer ideas, suggestions or plans to create value from Information Technology? (1= seldom, 2=sometimes, 3=average, 4= quite often, 5=it seems like all of the time)		2	3		
• Does the IT function actively encourage new solutions that use Information Technology to meet the business goals? (1= not encouraged, 5=strongly encouraged)		2	3		

Top 10 Critical Gaps need to be addressed and closed

- **Project Management & Service Delivery**
- **Require a Technology Architecture**
- **Total Cost of Ownership**
- **IT/Depart Align and Planning**
- **Business Acumen & CRM Interaction**
- **Sourcing Strategy & Supplier Mgt.**
- **Reporting & Measurements of IT Value**
- **Asset Inventory and Spend Analysis**
- **Training and Learning Workforce**
- **Business Recovery and Issue Mgt.**

Closing the Gaps With Departments



Operational Maturity
Operations Master

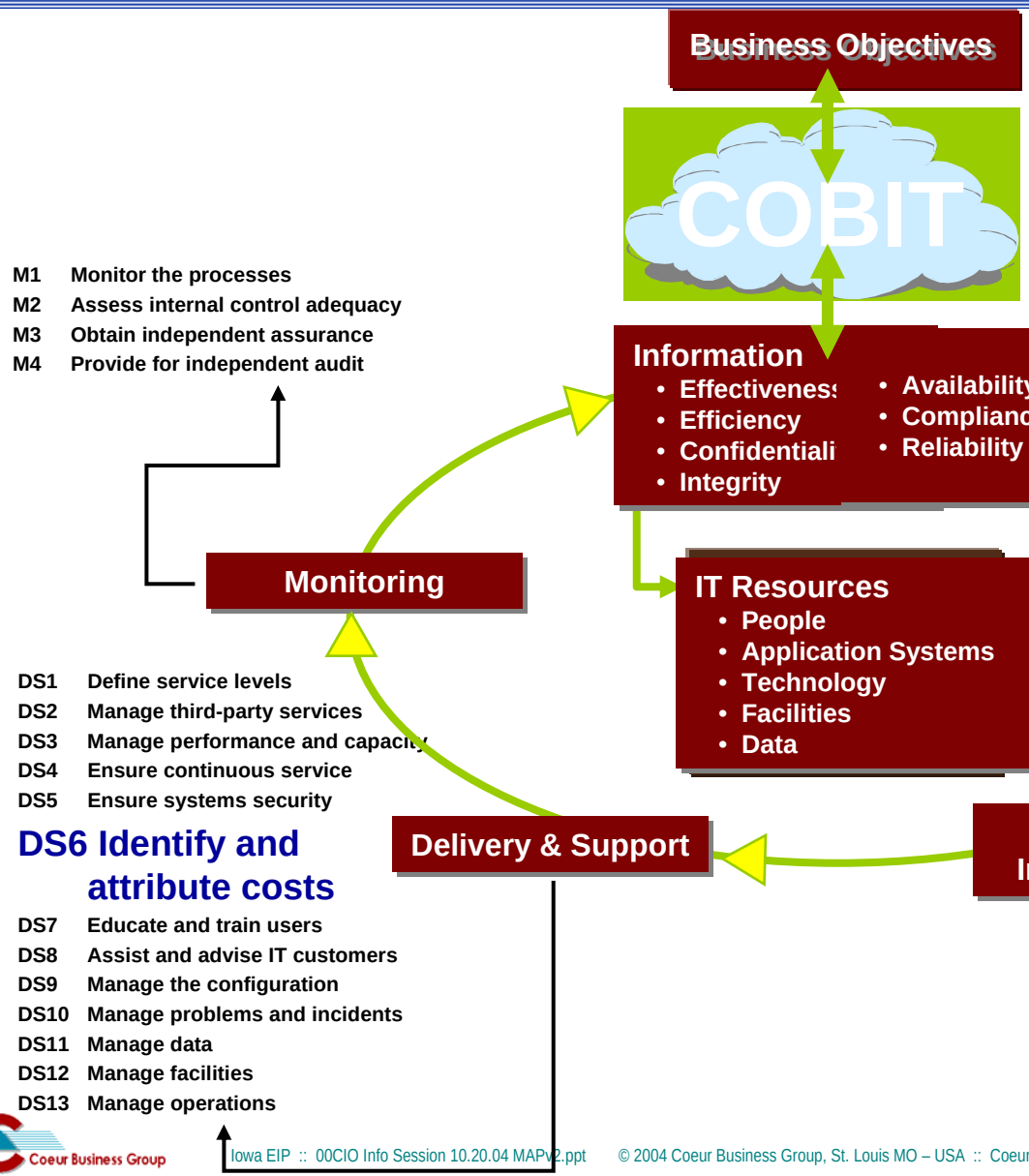
Coeur Business Group

Operational Capability & Maturity Levels

- Based on COBIT (Control Objectives for IT)
- 8 Operational Best Practice Areas
- 318 Control Categories
- Scoring based on an extrapolation of self assessment
- Develops Maturity Levels and Operational Capability scores

Efficiency and Effectiveness Patterns

COBIT Model: Four Domains and Control Objectives



PO1Define a strategic IT plan

PO2 Define the information architecture
PO3 Determine the technological direction
PO4 Define the IT organization and relationships

PO5 Manage the IT investment

PO6 Communicate management aims and direction
PO7 Manage human resources
PO8 Ensure compliance with external requirements
PO9 Assess risks
PO10 Manage projects
PO11 Manage quality

M1 Monitor the processes
M2 Assess internal control adequacy
M3 Obtain independent assurance
M4 Provide for independent audit

DS1 Define service levels
DS2 Manage third-party services
DS3 Manage performance and capacity
DS4 Ensure continuous service
DS5 Ensure systems security

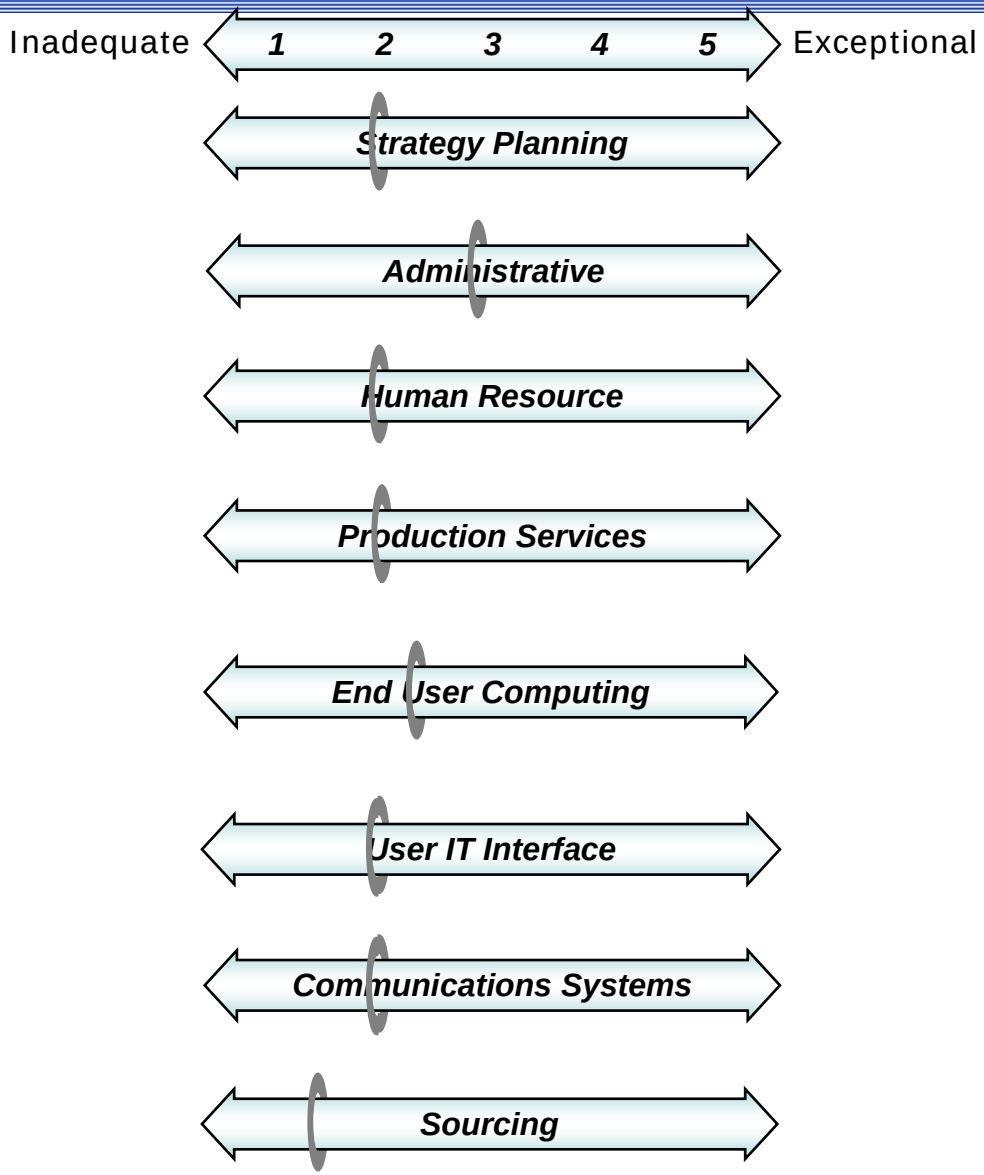
DS6 Identify and attribute costs

DS7 Educate and train users
DS8 Assist and advise IT customers
DS9 Manage the configuration
DS10 Manage problems and incidents
DS11 Manage data
DS12 Manage facilities
DS13 Manage operations

AI1 Identify solutions
AI2 Acquire and maintain application software
AI3 Acquire and maintain technology architecture
AI4 Develop and maintain IT procedures
AI5 Install and accredit systems
AI6 Manage changes

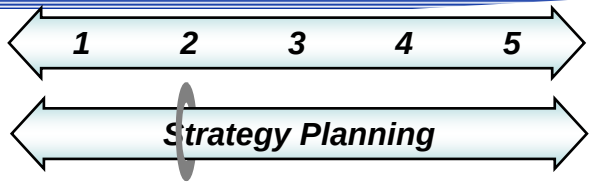
Source: ISACA

Operational Maturity Levels



Strategy Formulation & Planning

Key Observations:



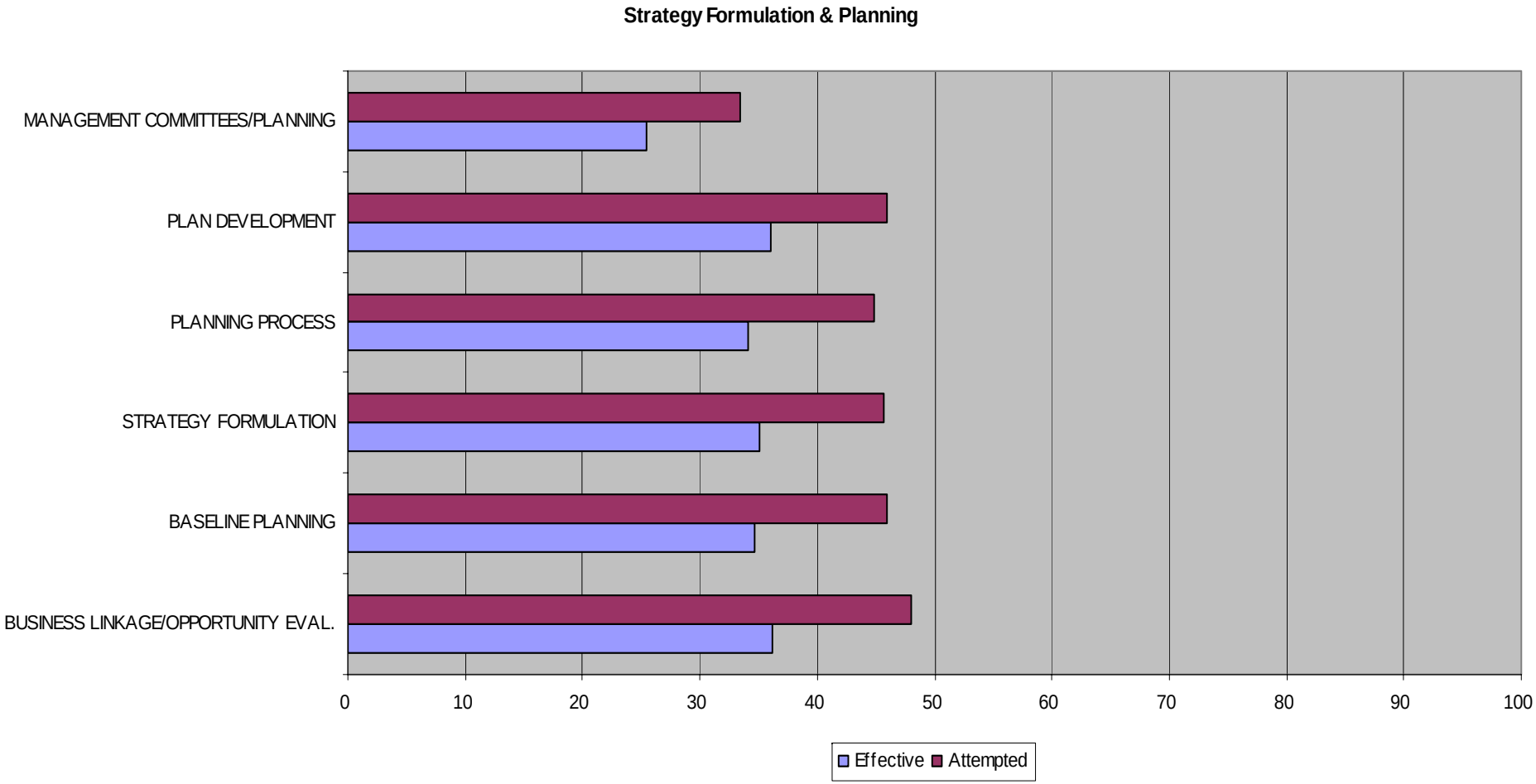
Business Alignment Strategy

A Statewide Strategy and Planning process is not evident.

Implication:

Without a Statewide IT Strategic Planning process, there will be a high potential for misalignment to the Governor's vision and, most importantly, Departmental and Constituent expectations.

Strategy Formulation & Planning



Department	Strategy Formulation and Planning	Administrative Management	Human Resources Management	Production Services Management	EUC Management Practices	User and IT Interface Management	Communications System Management	Sourcing
Large	46.27	70.18	58.13	63.03	55.79	46.32	58.27	49.68
	72.48	71.78	56.73	64.31	73.31	67.40	64.52	60.23
	33.47	24.46	26.41	26.42	29.99	26.61	26.42	18.82
	98.83	100.00	96.75	96.42	98.92	100.00	90.14	100.00
	36.20	64.26	56.34	34.35	32.35	25.74	27.98	46.20
	70.59	70.14	55.40	73.77	58.10	58.98	80.94	64.51
	59.50	76.21	54.93	77.58	66.06	68.54	64.95	59.56
	90.36	95.88	87.79	88.29	87.98	90.40	95.60	84.69
Medium	63.23	75.28	41.92	50.11	60.53	67.45	59.10	37.54
	12.53	15.12	11.26	12.65	20.94	14.30	13.66	11.24
	41.96	49.48	45.10	65.34	72.61	43.69	45.46	27.25
	86.22	91.99	83.62	62.43	83.46	87.40	65.34	79.26
	40.40	52.89	61.37	63.83	59.22	21.87	51.51	68.26
	42.61	25.43	9.49	12.56	2.30	7.78	33.60	24.69
	33.43	67.91	44.68	38.75	48.30	44.13	32.81	32.18
	83.27	69.64	67.41	63.47	69.37	66.00	55.33	59.29
	8.68	21.18	5.00	10.30	15.79	0.00	18.61	0.00
	31.68	33.69	24.34	30.26	45.12	32.31	28.30	20.53
Small	20.88	32.44	37.16	30.49	54.53	36.64	50.66	13.81
	17.61	15.53	20.02	20.39	18.83	8.96	8.33	0.00
	14.69	23.07	18.10	20.62	12.09	5.35	5.57	0.00
	32.65	44.25	29.96	21.22	22.64	5.98	25.41	13.82
	34.05	39.05	25.07	27.94	39.09	31.90	39.72	34.65
	100.00	100.00	81.58	61.86	88.00	88.00	19.56	0.00
	32.00	34.22	20.23	31.18	27.74	31.53	21.02	2.44
	6.84	13.10	20.46	15.89	17.89	0.37	2.77	0.00
	37.36	69.17	28.88	21.92	40.28	0.00	0.00	15.02
	23.11	75.44	28.92	39.55	61.93	25.32	14.65	26.99
	4.60	12.84	0.98	4.73	9.58	0.00	4.44	0.00
	21.69	**52.48**	**19.59**	**22.07**	**37.26**	**8.44**	**6.36**	**14.00**

Multi Dimensional Analysis

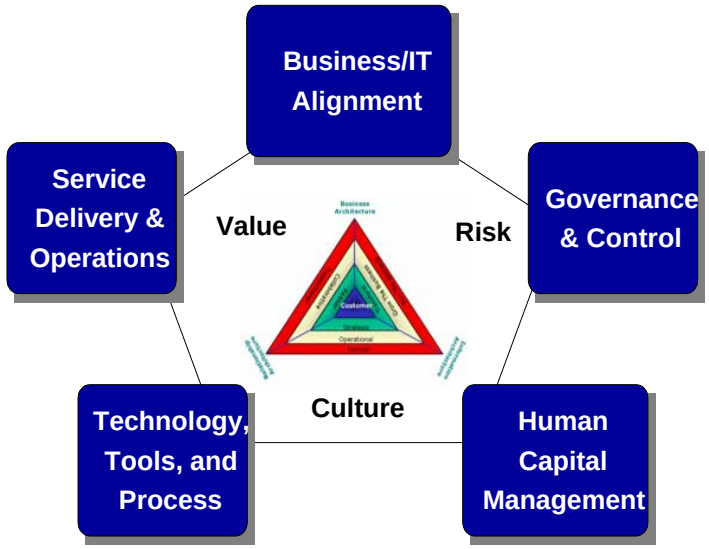
Business/IT Alignment
examines the overall business strategy, executive commitment, business case for the initiative, the IT strategy, and the current state of business and IT alignment.

Governance and Control
considers two key elements: Governance – the tools and techniques used to prioritize initiatives and allocate resources across the enterprise, and Control – the tools and techniques used to manage and control the program initiative.

Human Capital Management
examines organizational and personnel considerations, including organization structures, culture, readiness, training, and alignment of roles, responsibilities, and incentives with objectives.

Technology and Tools
examines the technology solution: enterprise architecture, information architecture, technical architecture and infrastructure, application architecture, behavioral characteristics, and tools and standards for application delivery.

Service Delivery and Operations
examines the tools and processes installed to support ongoing operations.



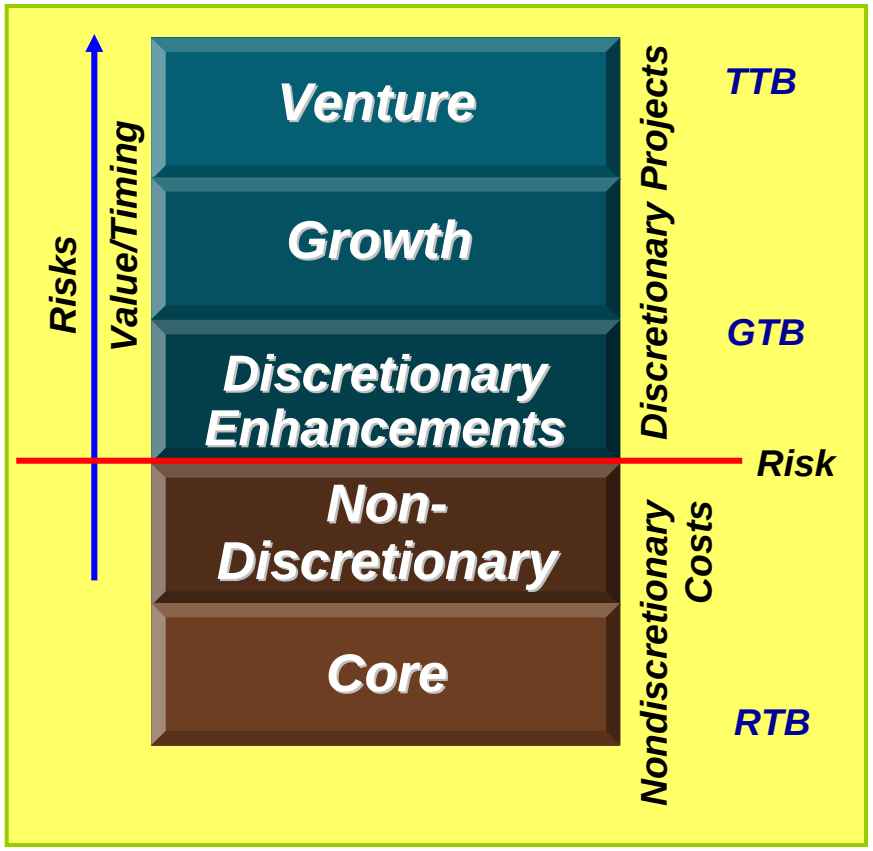
An Analysis of the Critical Factors Effecting the EIP Assessment Areas

Evaluation Elements Requiring Organizational Improvements

Business/IT Alignment	• Strategy, Vision & Goals • Business Case and Risk • Business Processes & Reqts	• Executive Commitment/CSFs • Business/IT Relationship • Communication Plans
Governance & Control	• Governance Model • Information Policy • Methodologies	• Program Mgmt • Budget & Resource Mgmt • Statement of Work
Human Capital Management	• Organization Structure • Organizational Readiness • Functional Competencies	• Training • Knowledge Transfer
Technology, Tools, & Process	• Architectures and Standards • Process/Tool Mapping • Product Viability	• Application Delivery • Infrastructure Engineering • Behavioral Characteristics
Service Delivery & Operations	• Enterprise Systems Mgmt • Service Level Mgmt	• Sourcing/Vendor Mgmt • Contracts

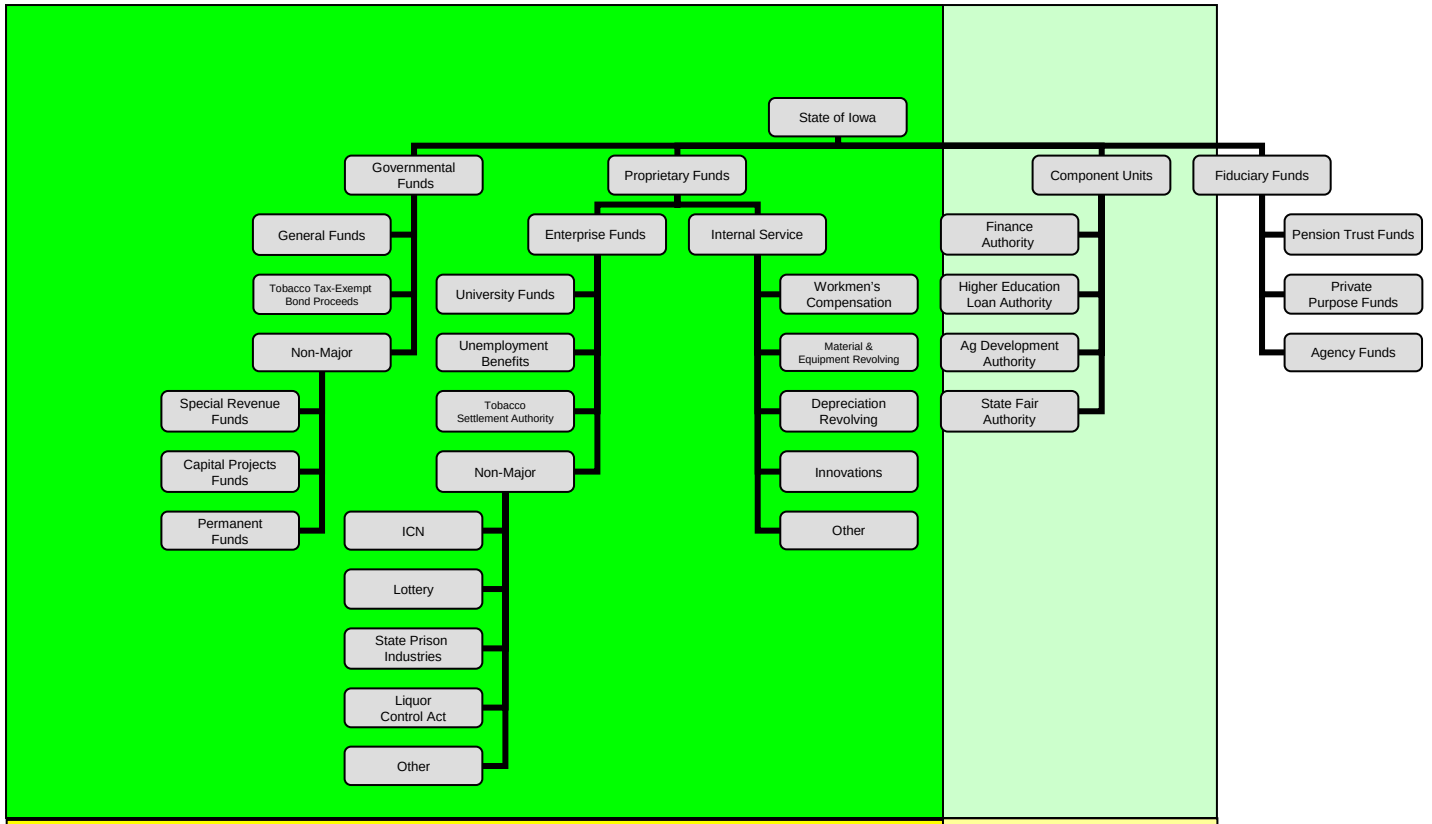
Prioritization and Value Categorization

Technology Investment Portfolio



The IT Organization As a Whole Has Inadequate Processes to Define, Track and Manage the Budget Process in a Standardized Fashion.

Iowa Fund Structure



Primary Revenue Sources

•Taxes	$4.9B
•Receipts From Other Entities	$3.6B
•Charges for Service	$3.1B
•Other	$2.0B
Total	**$13.5B**

Primary Expenses

•Human Services	$3.4B
•Education	$2.6B
•Personal Services	$1.5B
•Admin & Reg	$1.2B
•Transportation	$1.0B
•State Aid to Univ	$0.7B
•Justice & Pub Dfns	$0.6B
•State Aid & Credits	$0.4B
•Other	$2.0B
Total	**$13.4B**

Revenue Sources	
•Charges for Service	$0.09B
•Contributions	0.05B
Total	$0.14B
Expenses	
•Direct Expenses	$0.06B
Chg in Net Assets	$0.08B

Executive Vision and Business Drivers

Common Vision Requirements for Information Technology

Departments' View of What They Value

Iowa Common Business Drivers

1. **Security**
   1. *User access*
   2. *Homeland Security*
   3. *Intrusion Detection*
2. **Data Management**
   1. *Integrity*
   2. *Accessibility*
   3. *Storage*
3. **Regulatory**
   1. *Compliance*
   2. *Federal /State Programs*
4. **Cost Management**
   1. *Effectiveness/Efficiencies*
   2. *Avoidance*
5. **Service Delivery**
   1. *Problem Management*
   2. *Change Management*
   3. *Service Level Agreements*
6. **Business/Constituent Alignment**
   1. *Funding Process*
   2. *Constituency Alignment*
   3. *Strategic Focus*

Of Note

- Over 500 Technology Based Vendors Statewide
- Nearly 400 Technology Based Vendors for the EIP Study
- 80% of IT Vendor Spend Is With 30 Vendors
- Vendors Not Being Managed to Performance Metrics
- Vendor Relationships Are Not Being Leveraged Across Departments
- Projected Significant Savings Potential Over Three Year Life Cycle

  With Proper Vendor Management Practices in Place

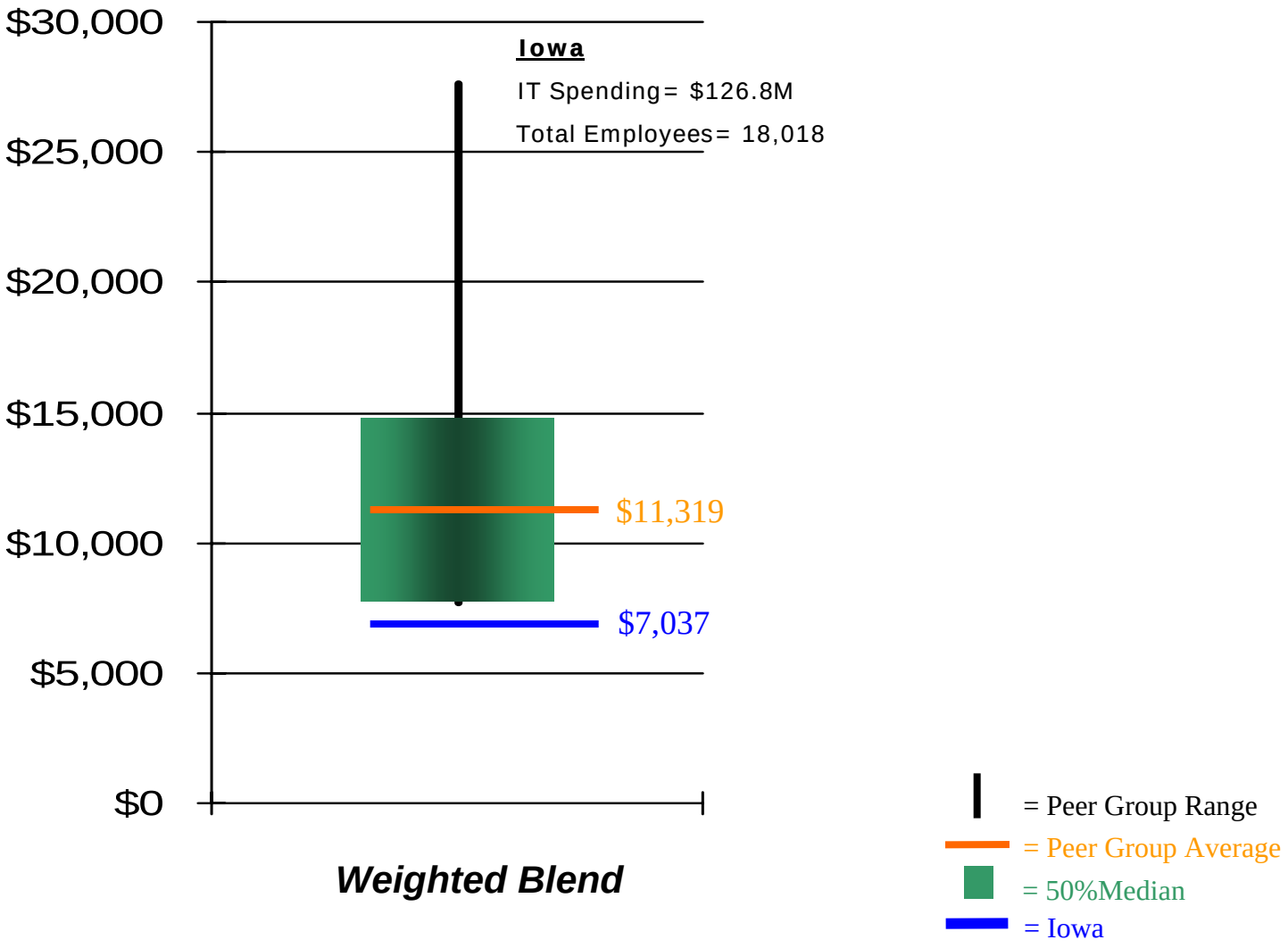
First Strikes in Consolidation

Top Consolidation Program Winners

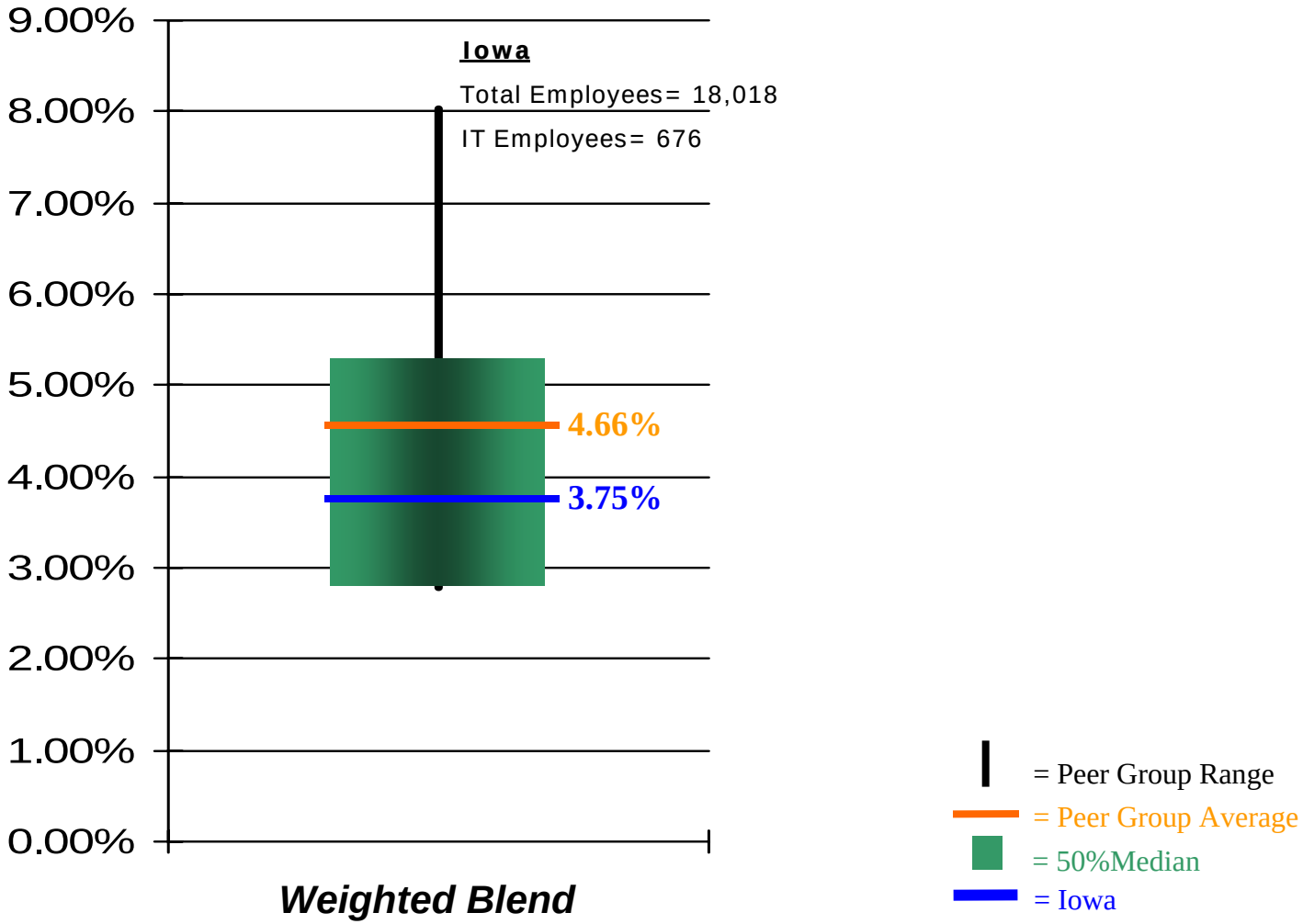
- Governance Process (control investments to standards)
- Vendor Performance Management (value based contracts)
- Data Center Consolidation (backup and disaster recovery)
- Common Statewide Infrastructure
- Network Consolidation
- Application Consolidation Initiative (full inventory first)
- Telecommunications Utility (utilize statewide)
- Desktop Life cycle (spend to standards, cascade)
- Procurement Processes (commodity buys, web buy type)
- Defined Architecture for Project Procurements

Process and Cost Impacts

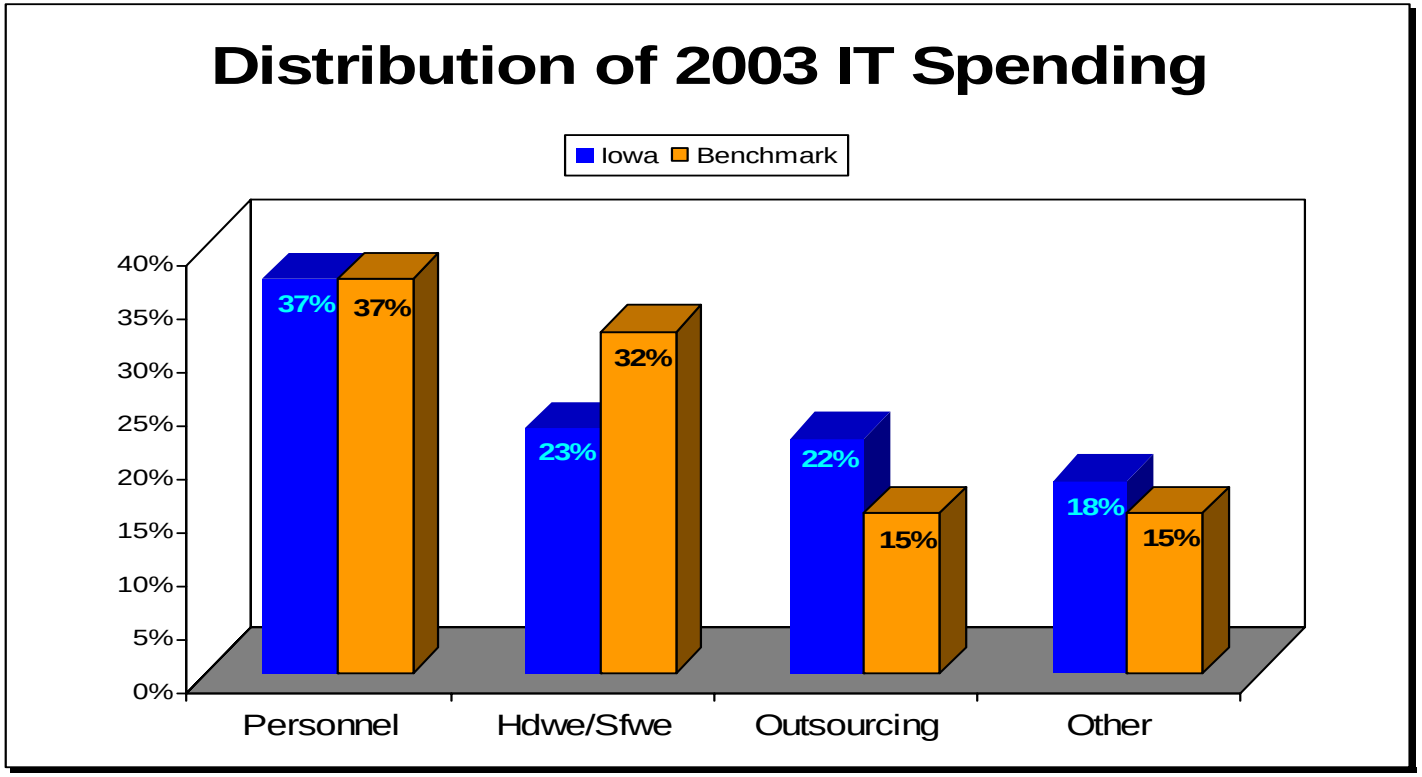
2003 IT Spending Per Employee



Percent of Employees Dedicated to IT

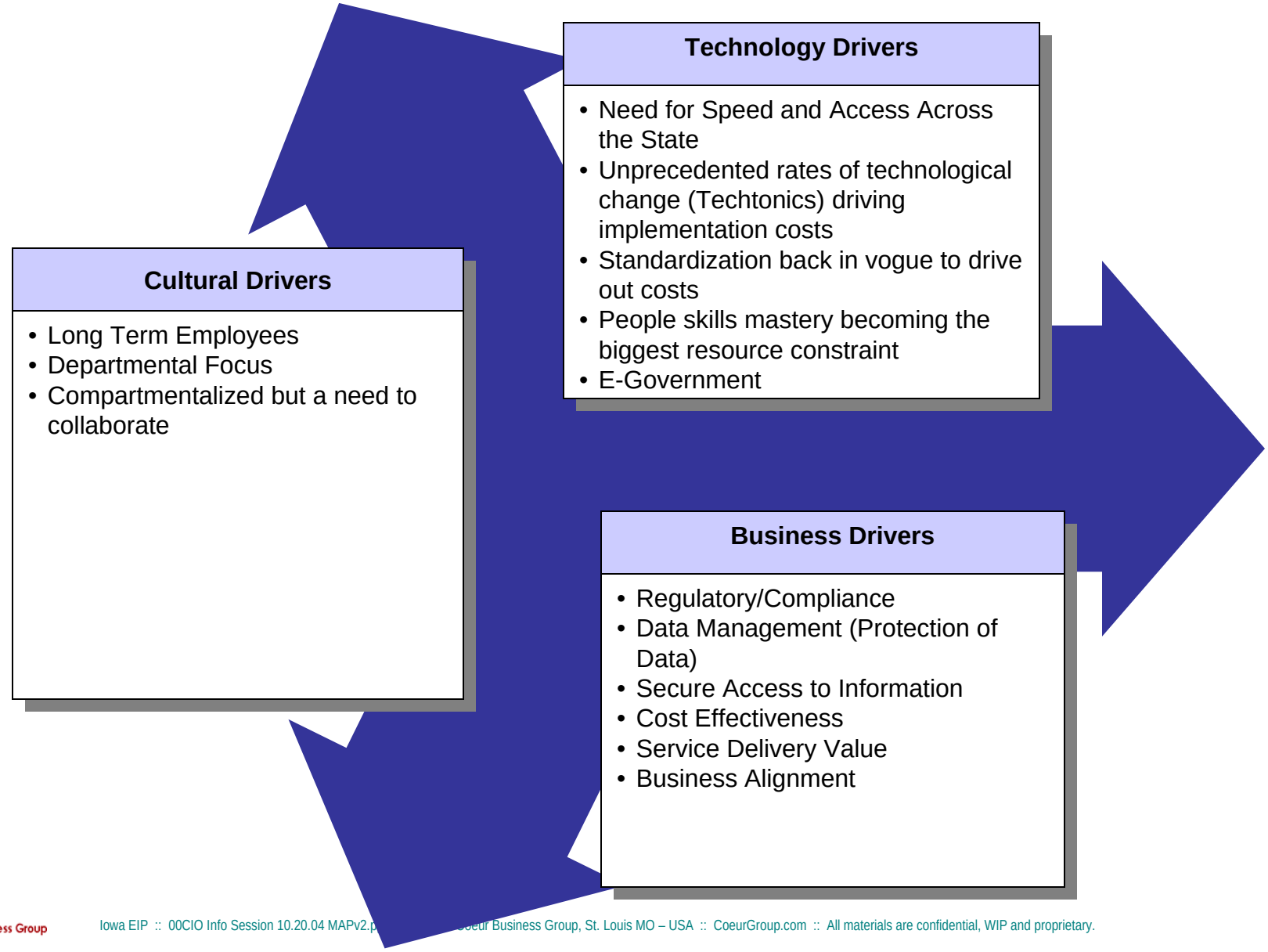


2003 IT Spending



Organizational Trends

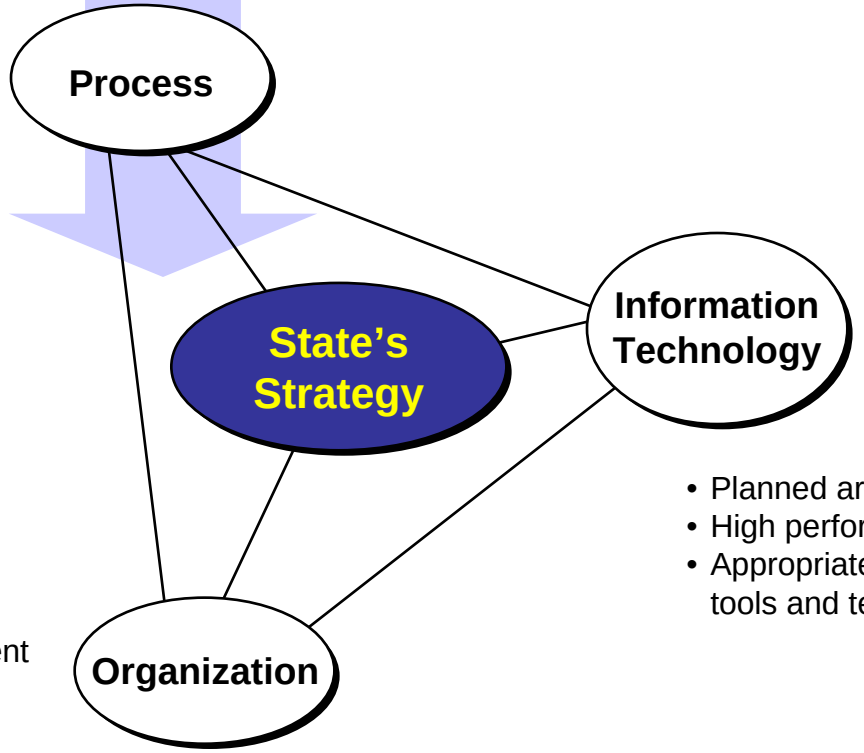
Forces That Are Reshaping State Government in Iowa at an Unprecedented Rate



The Business Strategy Drives Implications for IT Across the Classic Dimensions

Regulatory & Compliance | **Security** | **Data Management** | **Cost Control** | **Service Delivery** | **Department Business Alignment**

- Best Practice, high quality IT processes
- Well defined & architected information flows
- Meaningful metrics, tied to performance, clearly communicated



- Planned architecture
- High performing production environment
- Appropriate investment in supporting tools and technologies

- Enabling culture
- Appropriate skills
- Planned career development
- Aligned incentives & Performance

Organization Change Principles

8 Guiding Principles for IT Reorganization/Centralization

1. Creating & enabling leadership at every level:

Senior personnel must lead to clarify ambiguity, decide with imperfect information, achieve progress amid numerous distractions, build trust among strangers, and enhance team communication among individuals.

2. Becoming technically astute:

Periodic experiments, prototypes, and speculative, analytical configurations test an organization's ability to detect vaporware (false IT products) and re-engineer systems.

3. Creating an information sharing culture:

Senior IT staff members reinforce that complex solutions are best solved by collaborative performances.

4. Developing rapid learning:

The pace of technology change and application requires constant and continual learning.

5. Encouraging and rewarding prudent risk-taking:

Change is inherently risky; encourage sensible risk taking with the understanding that some failures are bound to occur.

6. Focusing on business relationship management:

Although agile ITOs have cultures of awareness, learning, and information sharing, knowledgeable ITOs stay dynamically aligned with their lines of business (LOBs). CIOs recognize business's changing nature, appoint specialists (BRMs) to facilitate close business/IT relationships,

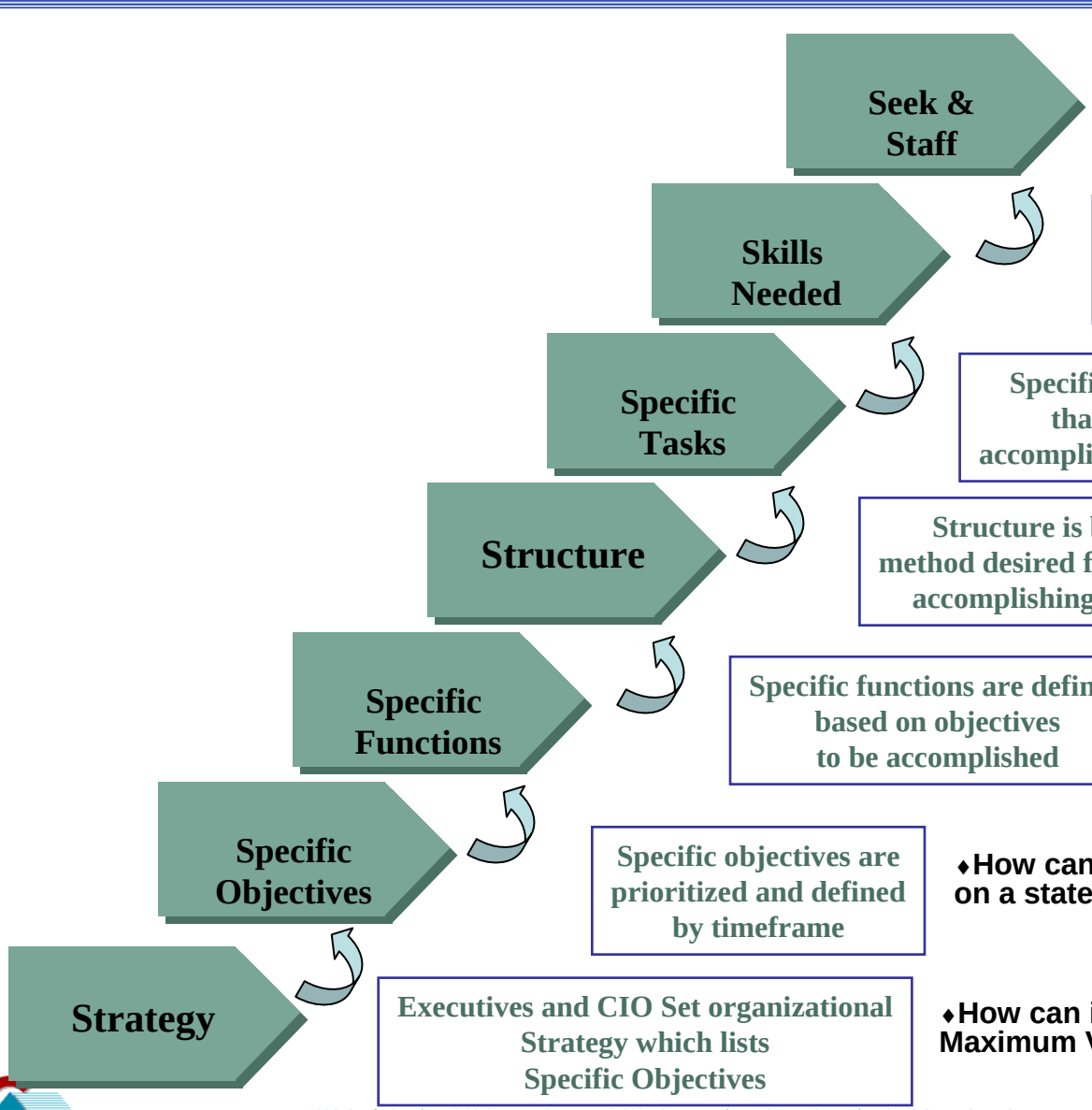
7. Gaining relentless execution:

High-performance ITOs meet their financial, process, employee, operations, transition, portfolio, and risk commitments and expectations on time and on budget.

8. Having meaningful measures of work:

Multivariable metrics (money, time, resource improvement, maturity, increased customer satisfaction, etc.) must be used to comprehensively capture and communicate progress and value.

7 Steps of Organization Change



Executives and CIO Set organizational Strategy which lists Specific Objectives

♦How can investments in technology add Maximum Value to the State?

Specific objectives are prioritized and defined by timeframe

♦How can we increase cost effectiveness on a statewide basis?

Specific functions are defined based on objectives to be accomplished

♦How can we provide a greater focus on the core mission of the State?

Structure is based on the method desired for managing and accomplishing the objectives

•How can we effectively manage Scarce Resources and improve service delivery?

Specific Tasks are identified that will provide best accomplishment of the objectives

Skills are identified to enable accomplishment of the tasks specified

Responsible management seeks and recruits individuals that possess the skills which will enable accomplishment of the objectives

Process First

The Departmental Business Strategy Drives Implications for IT Across the Classic Dimensions

Regulatory & Compliance | **Security** | **Data Management** | **Cost Control** | **Service Delivery** | **Department Business Alignment**

- Best Practice, high quality IT processes
- Well defined & architected information flows
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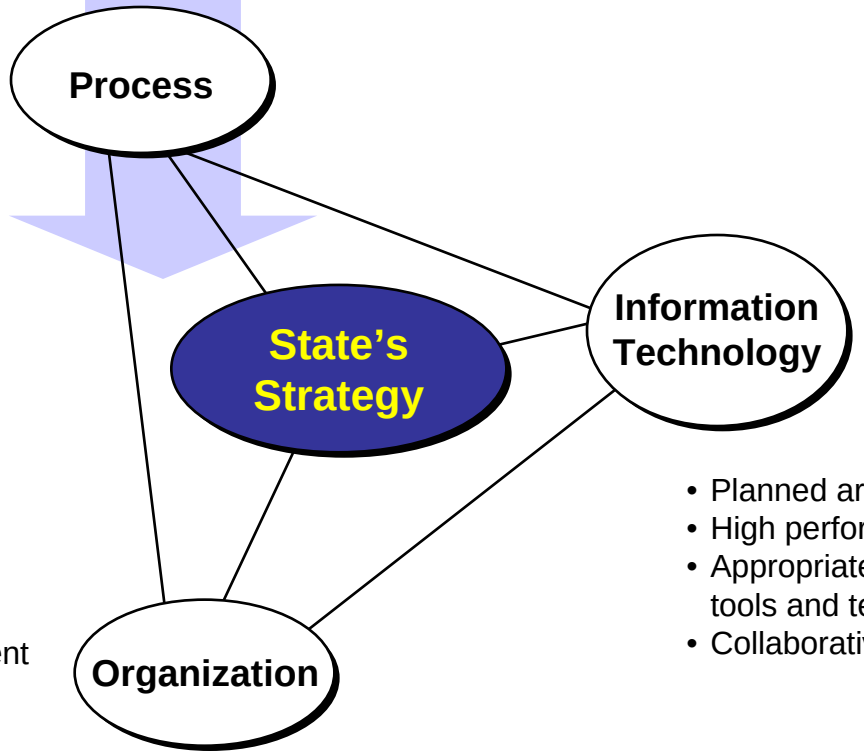


- Planned architecture
- High performing production environment
- Appropriate investment in supporting tools and technologies
- Collaborative and leveraged

- Enabling culture
- Appropriate skills
- Planned career development
- Aligned incentives & Performance
- Innovative Culture

What Are The Objectives Of House File 534

- **How Can Investments In Technology Add Maximum Value To The State?**
- **How Can We Increase Cost Effectiveness On A Statewide Basis?**
- **How Can We Provide A Greater Focus On The Core Mission Of The State?**
- **How Can We Effectively Manage Scarce Resources And Improve Service Delivery?**

Process Recommendations

Initiate A Statewide Investment Governance Process And Structure

(Technology investment decisions based on business drivers in support of customer requirements)

Develop A Statewide Architecture Strategy

(Drives technology and infrastructure standards and aids in establishment of a statewide information policy)

Develop A Sourcing Strategy

(A sourcing strategy defines vendor partnering relationships based on product and services as well as performance measures and denotes changes in procurement processes to drive critical efficiencies for dealing with suppliers and purchase of standards including spend audit and control)

Develop A Program Management Office

(Provides for successful management of mission critical projects and initiatives from an enterprise perspective. Develops a standard project management approach to maximize the use of subject matter expertise across the enterprise)

Create A Customer Relationship Management Focus

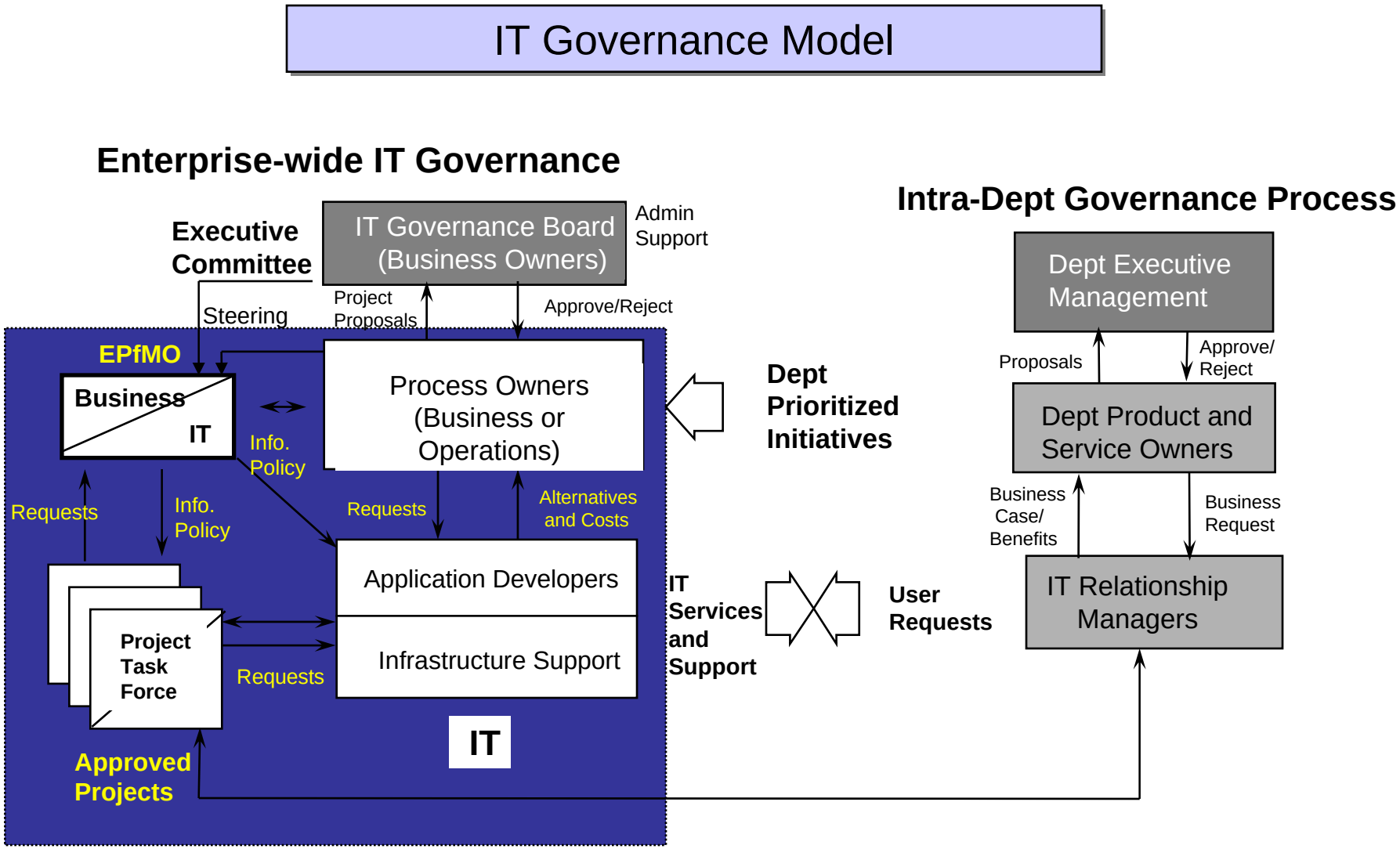
(Create and implement an effective customer relationship model to ensure departmental and technology alignment)

Develop Process Controls To Increase Workforce Skills And Utilization

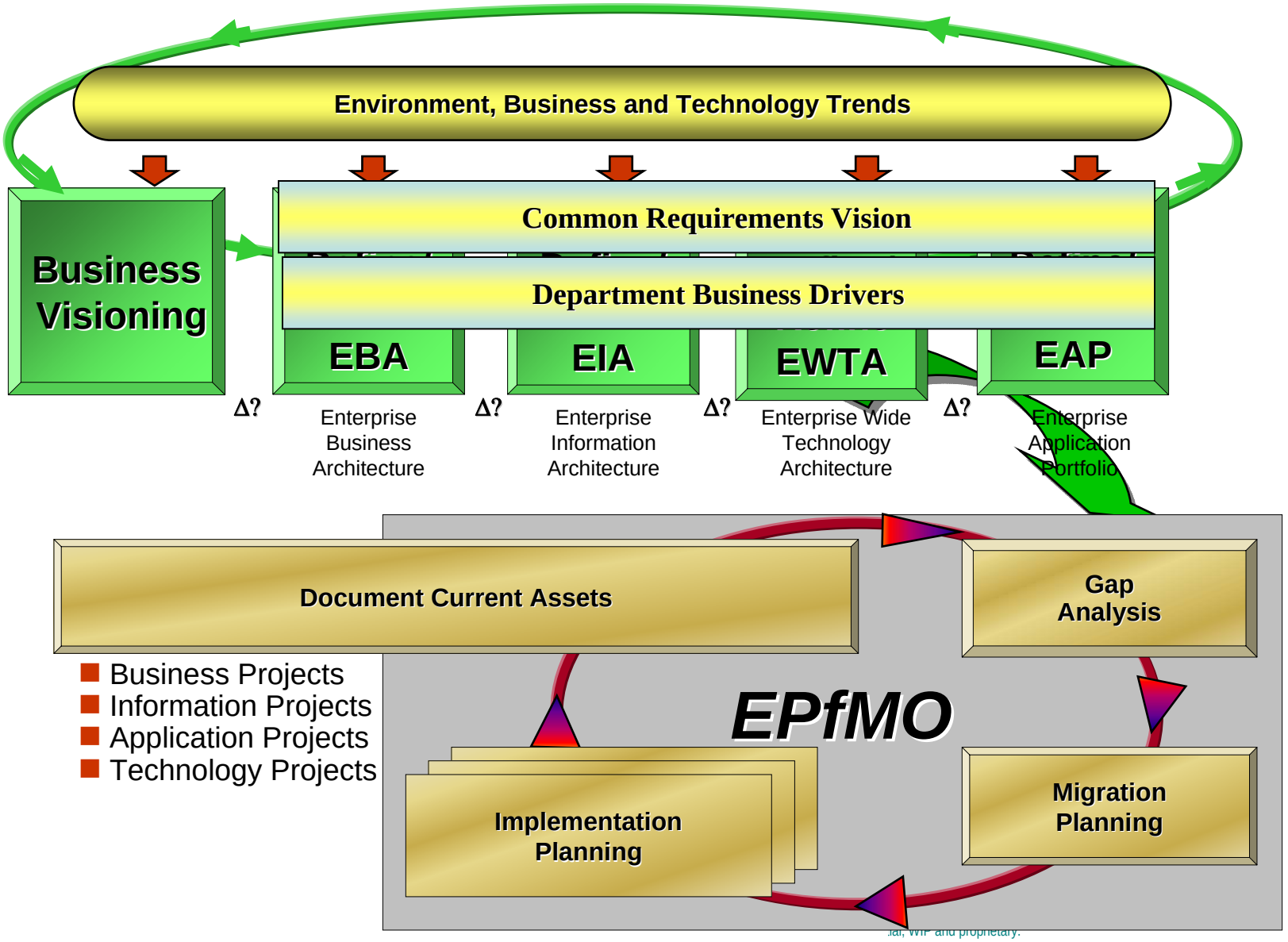
Process Model Review

Investment Governance Model
Enterprise Architecture Model
Client Relationship Model

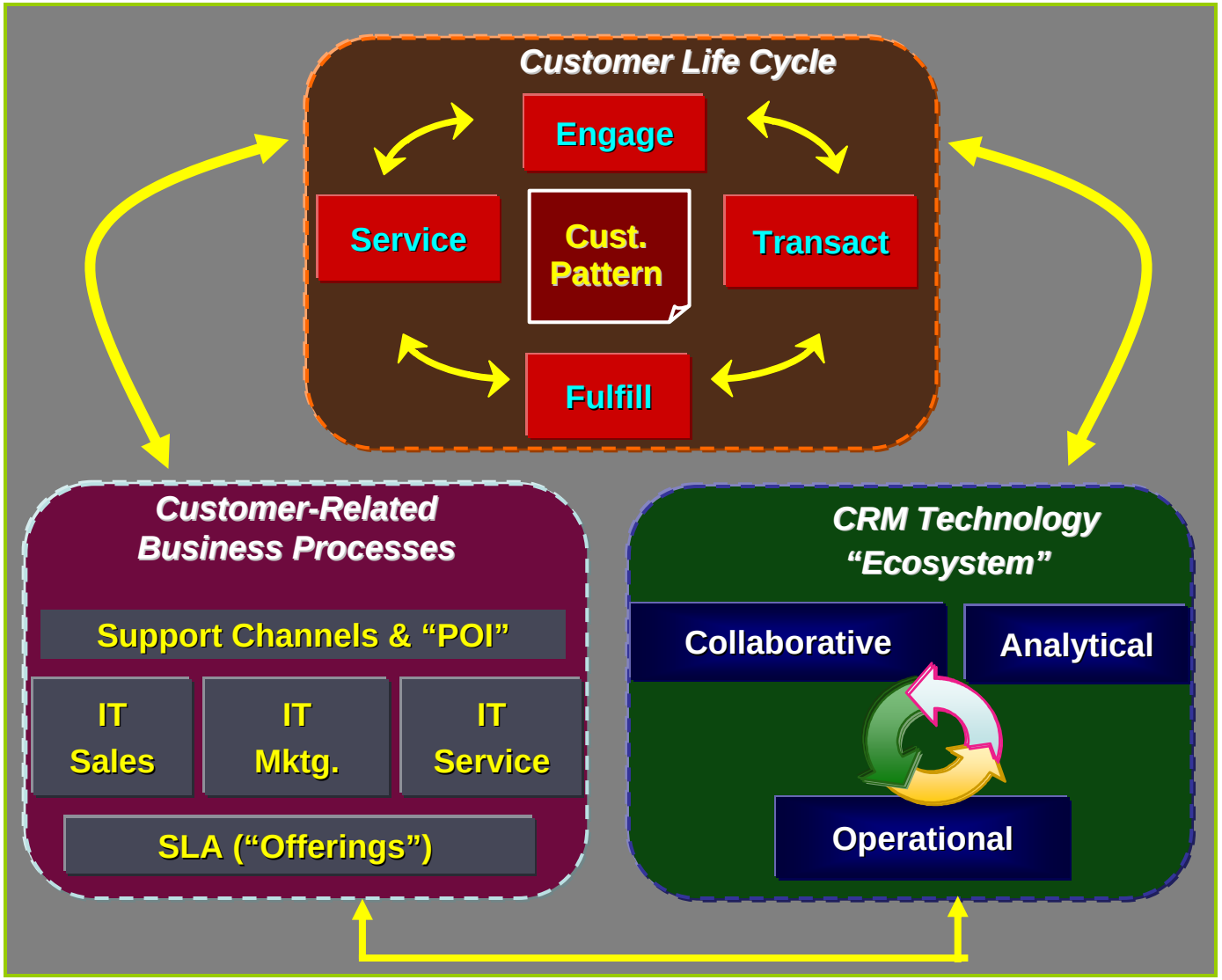
IT Governance Model



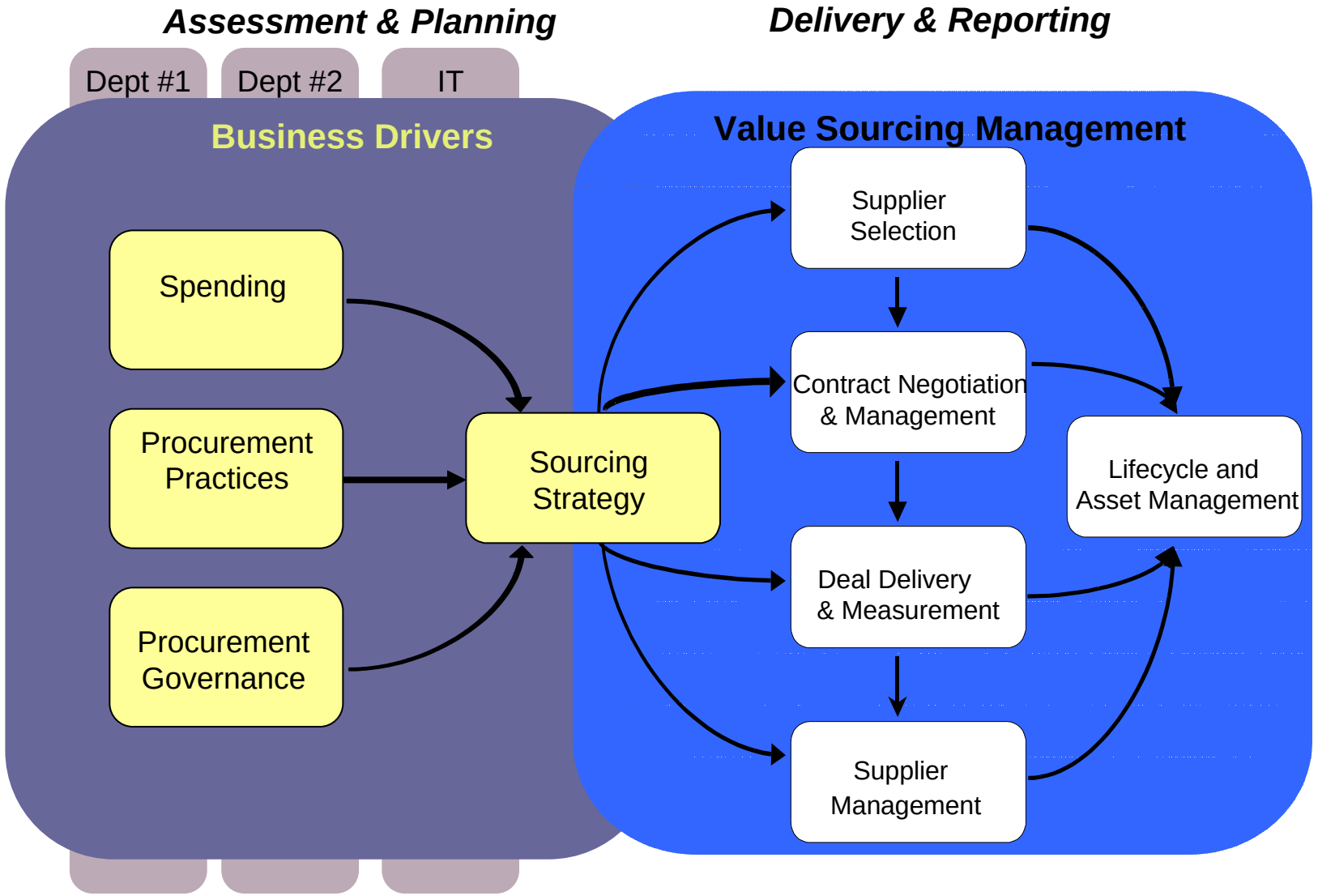
Enterprise Architecture Development Model



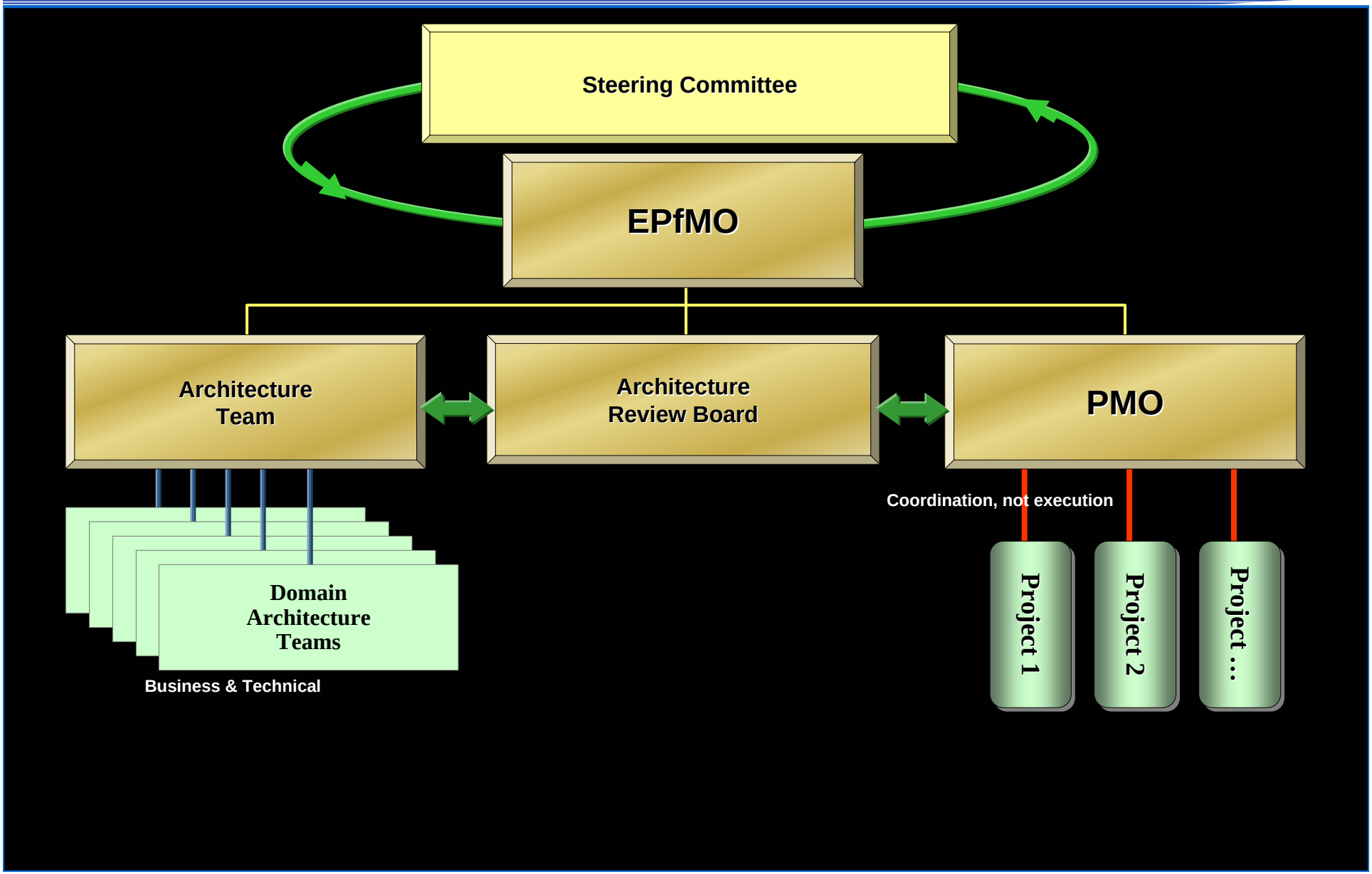
Customer Relationship Model



Value Sourcing Framework Roadmap

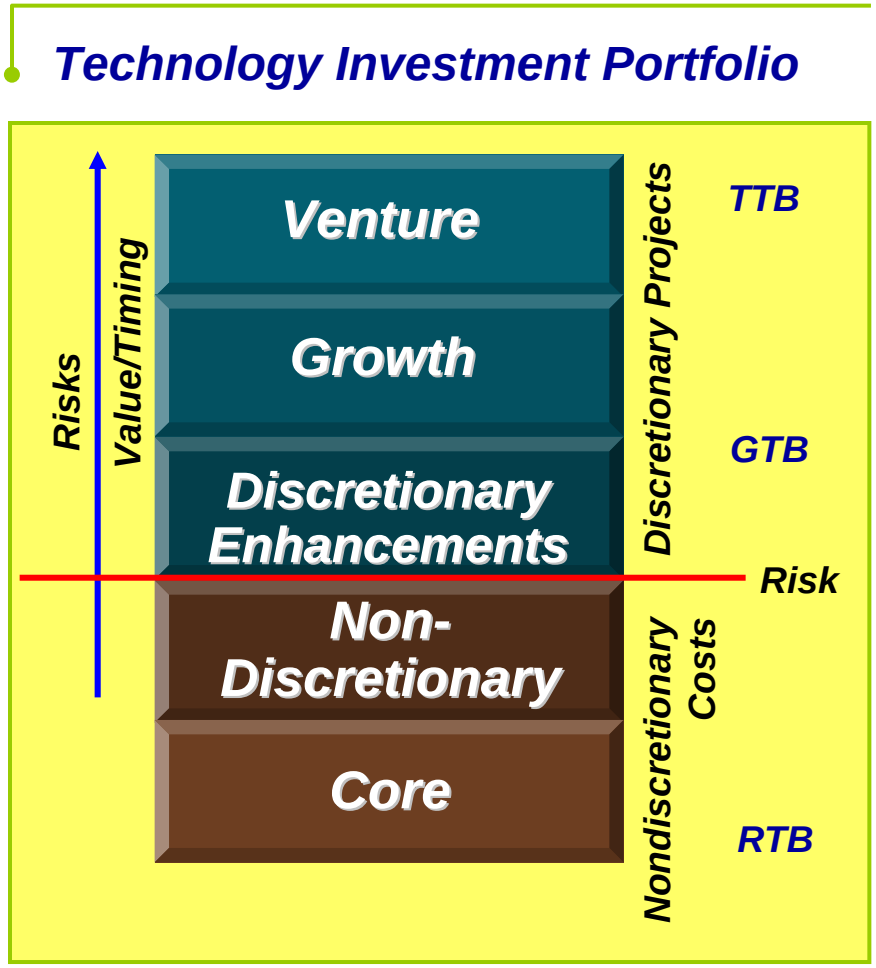


Enterprise Governance Model & Key Relationships



Organization Structures

Prioritization and Value Categorization



What are the Objectives

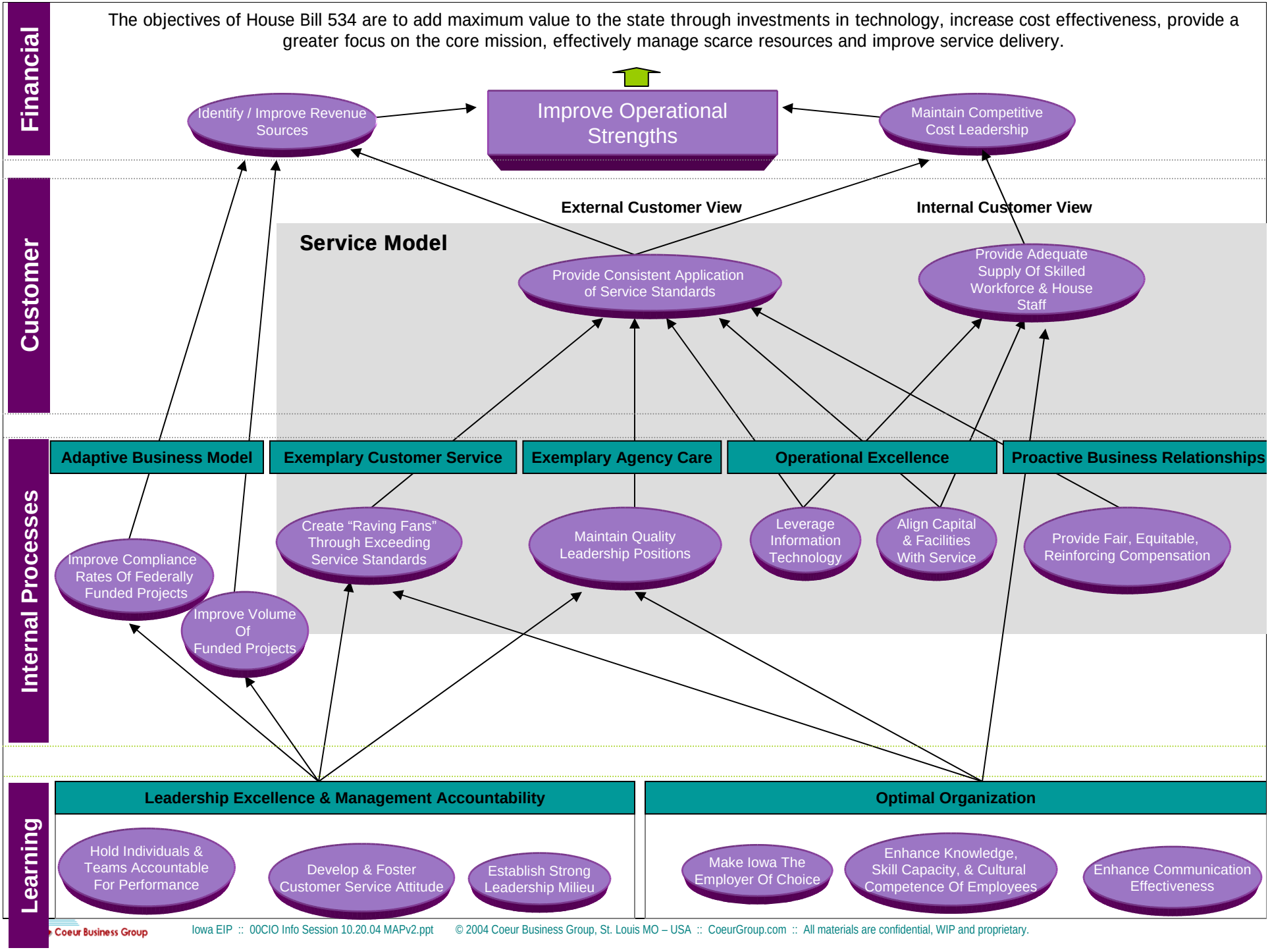
- Maximize Investments In Technology And Add Value To The State
- Increase Cost Effectiveness On A Statewide Basis
- Provide A Greater Focus On The Core Mission Of The State
- Effectively Manage Scarce Resources And Improve Service Delivery

Innovation in Government – Basic Premises (David Osbourne)

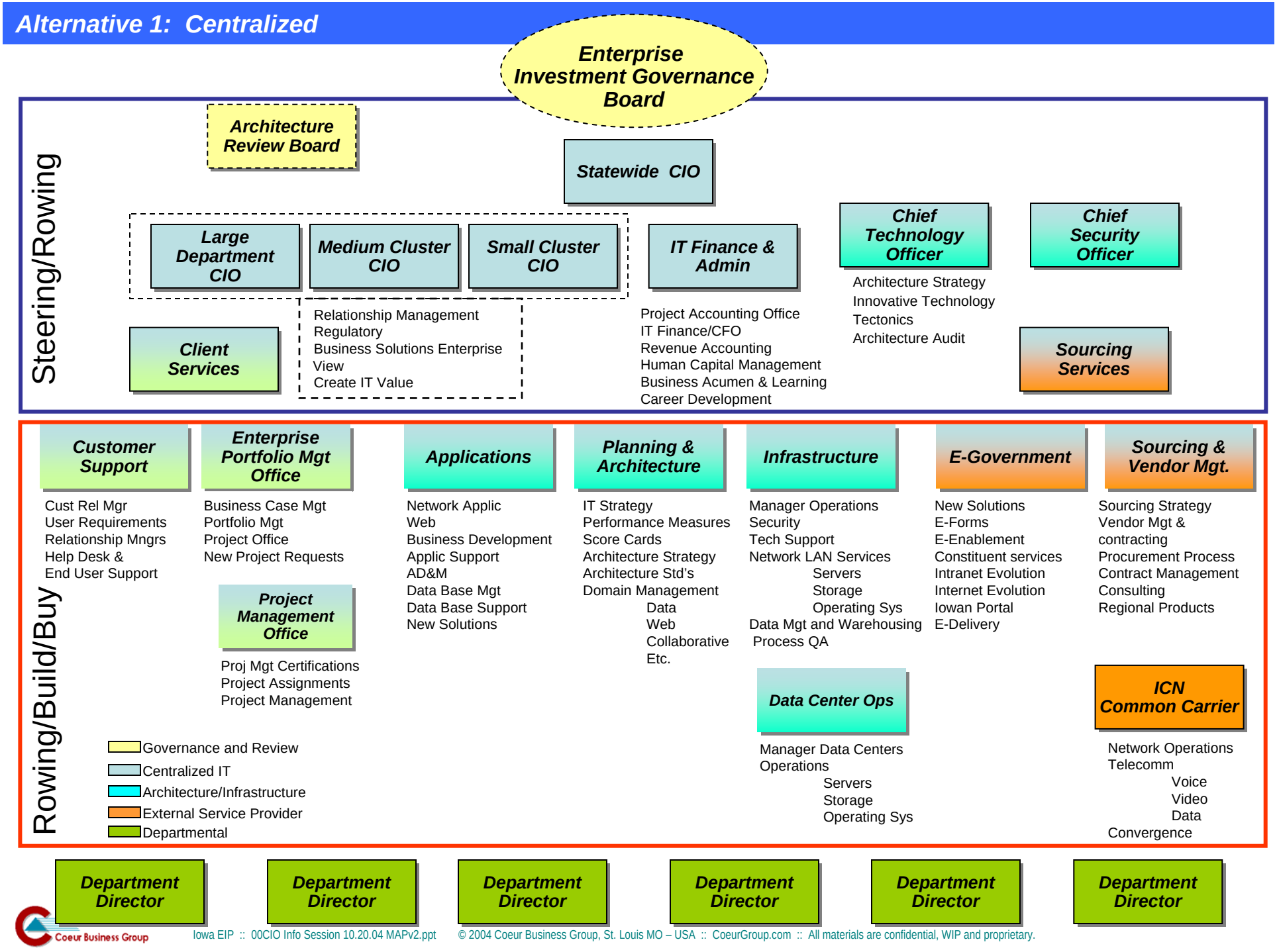
- Flatten the Hierarchy
- Separate Steering From Rowing
  - *Policy decision from Delivery decisions*
- 3 Keys to Steering Organizations
  - *Set policy*
  - *Deliver funds to operational bodies (public/private)*
  - *Evaluate Performance (what get's measured get's done)*
- Mission Driven vs. Rules Driven (agile, high moral)
  - *Critical Success Factors*
  - *6 Majors Business Drivers*
  - *8 Gaps to close*

"Never tell people how to do things, tell them What you want them to achieve and they will surprise you with their ingenuity"

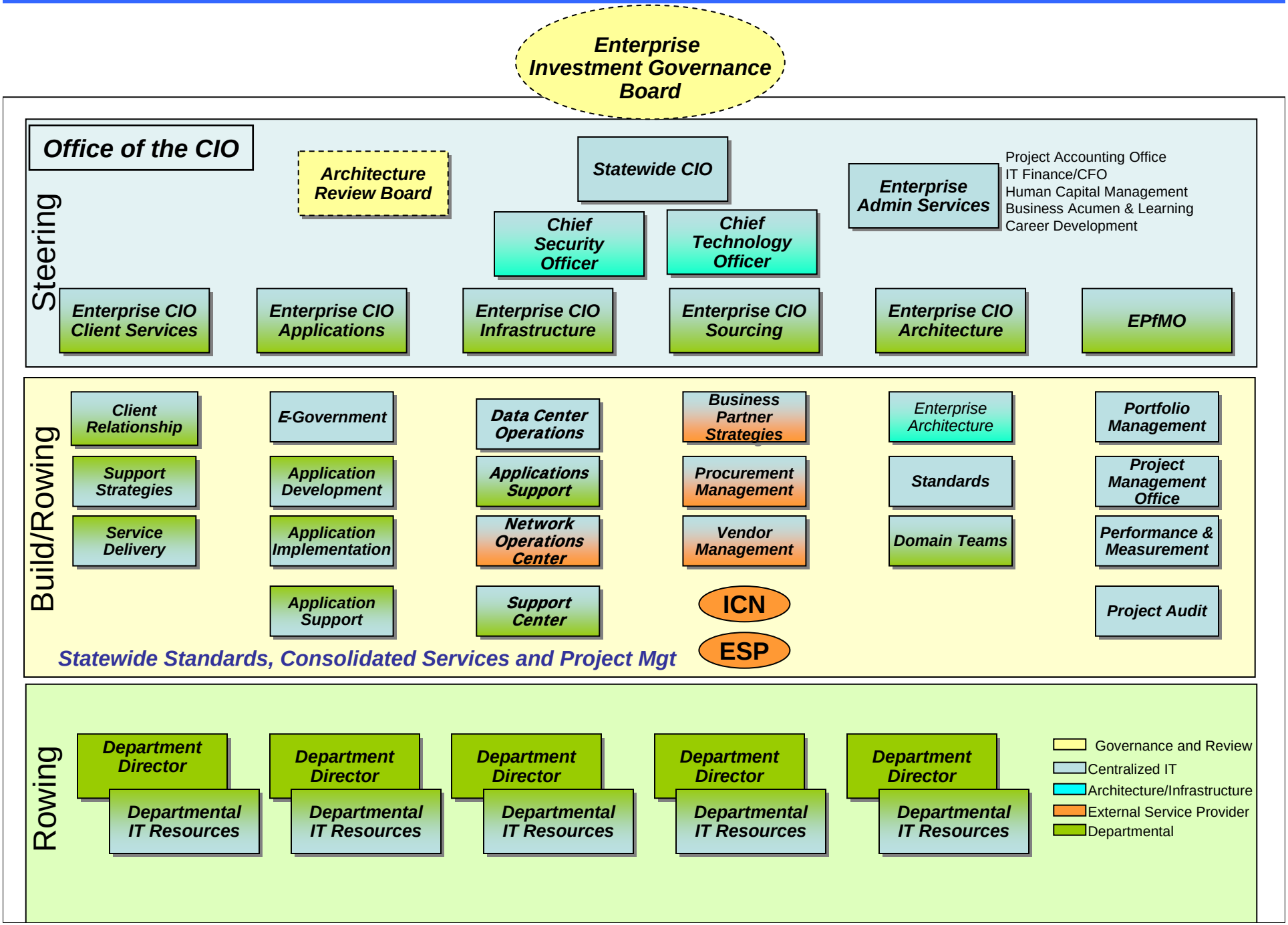
General George S. Patton



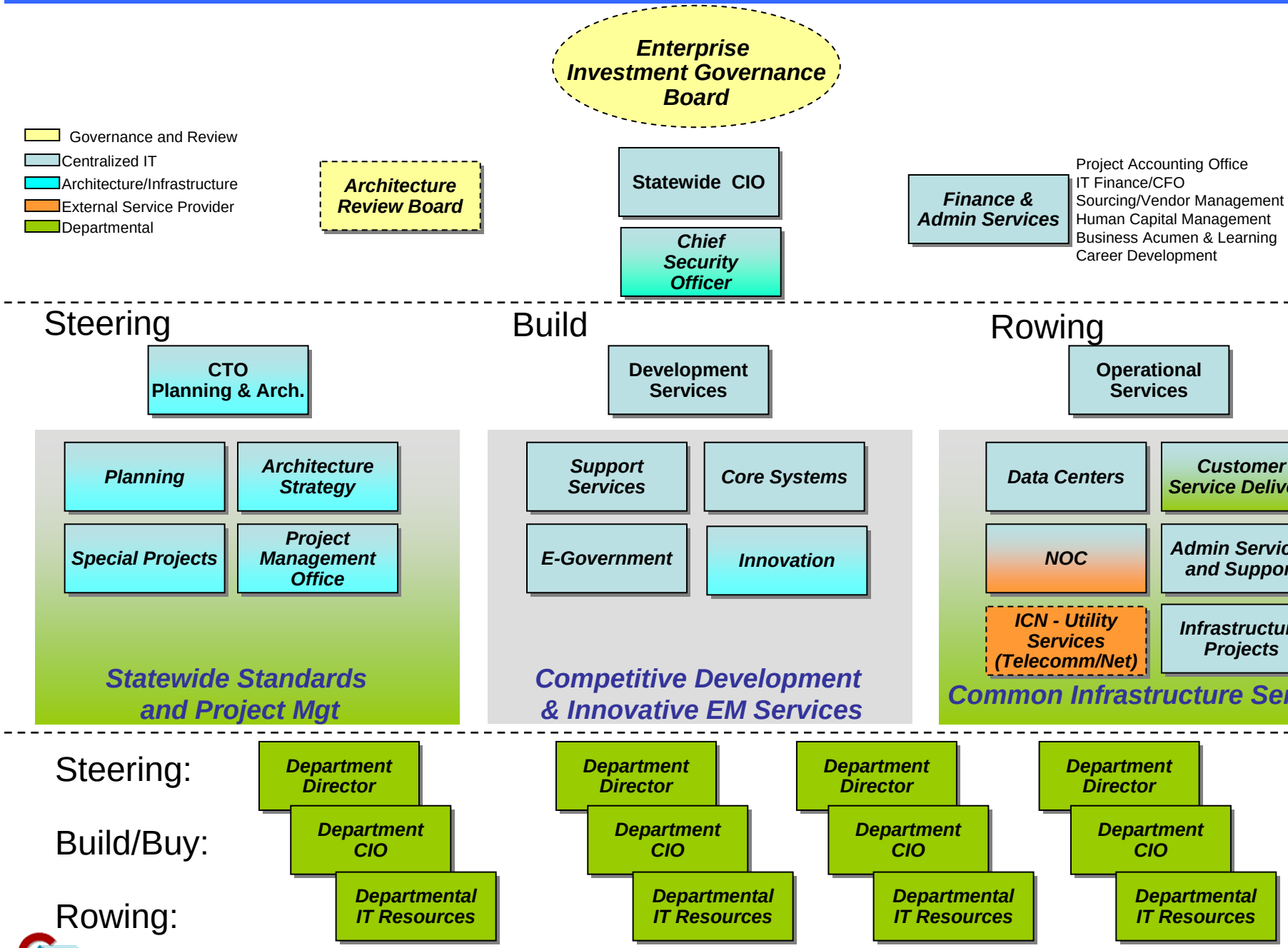
Alternative 1: Centralized



Alternative 2: Service Provider Model



Alternative 3: Federated / Shared Services



Current DAS/ITE and Departmental:

- *Standard-setting*
- *Process management*
- *Special projects*
- *IT vision & strategic planning*
- *IT Architecture*
- *IT governance*
- *Invest Priority & Evaluation*

DAS COO ITE

DAS Finance

Project Accounting Office
IT Finance/CFO

DAS Procurement

ITE - I3

ITE - Applications

Shared Application Components

Shared Networking

ITE - Infrastructure

Shared Infrastructure Components

Shared Desktop Support

ITE Data Centers

Department Exec
IT CIO DOT
- Systems
- Operations
- Applications
- Sourcing

Data Centers

Department Exec
IT CIO DHS
- Systems
- Operations
- Applications
- Sourcing

Department Exec
IT CIO IWD
- Systems
- Operations
- Applications
- Sourcing

Data Centers

Department Exec
IT CIO Dept XXX
- Systems
- Operations
- Applications
- Sourcing

CIO Council

Governance and Review
Centralized IT
Architecture/Infrastructure
External Service Provider
Departmental

Next Steps

Next Steps

- Review notes and provide feedback as soon as possible
- Coeur Group will provide information presentations to;
  - *CIO Council on October 20th*
  - *AFSCME on October 20th*
- Incorporate updates into Coeur Group final recommendations
- Provide Final Review to EIP Steering Committee on November 5th
- Final presentation for Legislators

